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1. Which of the following perspective changes are allowed by a rigid transformation?

1 / 1 point

☒ translation

✔ Correct

Yes, a rigid transformation allows for translation changes.

☒ rotation

✔ Correct

Yes, a rigid transformation allows for changes in rotation.

☐ scale

☐ shear

☐ tilt

2. Which of the following perspective changes are allowed by a projective transformation?

1 / 1 point

☒ translation

✔ Correct

Yes, a projective transformation allows for translation changes.

☒ rotation

✔ Correct

Yes, a projective transformation allows for rotation changes.

☒ scale

✔ Correct

Yes, a projective transformation allows for changes in scale.

☒ shear

✔ Correct

Yes, a projective transformation allows for changes in shear.

☒ tilt

✔ Correct

Yes, a projective transformation allows for changes in tilt.

3. What is the minimum number of matched point pairs you need to estimate a projective geometric transformation?

1 / 1 point

☐ 2

☐ 3

☒ 4

✔ Correct

Yes, to estimate a projective transformation, you need at least four pairs of matching points. Remember that in practice, you usually want more than the minimum number of pairs.

4. To estimate the geometric transformation in MATLAB, you use the **estgeotform2d** function, which takes the matched points and transformation type as inputs. What are the two outputs of the function?

1 / 1 point

☒ The geometric transformation and inlier indices

☐ The inlier indices and number of iterations it took to run

☐ The geometric transformation and the number of iterations it took to run

✔ Correct

Yes, you can later use this geometric transformation to warp the image, and the inlier indices to access the relevant matching point pairs.